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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,291	06/27/2003	Thomas Patrick Jackson	491442001600	7894
42178	7590	08/26/2005	EXAMINER	
EMULEX DESIGN & MANUFACTURING CORPORATION C/O MORRISON & FOERSTER LLP 555 WEST FIFTH STREET, SUITE 3500 LOS ANGELES, CA 90013			KIM, HAROLD J	
		ART UNIT	PAPER NUMBER	2182

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/609,291	JACKSON ET AL.	
	Examiner Harold Kim	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 May 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.



DETAILED ACTION

1. This Office Action is in response to the filing of the Amendment, filed on 5/16/2005. The Amendment has been considered but it is moot in view of the new ground(s) of rejection. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, this action is made **FINAL**.
2. Claims 1-29 are presented for examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. **Claims 1-7, 12-18 and 23-29 are rejected under 35 U.S.C. 102(a) as being anticipated by Kamel et al., US Patent no. 6,263,411.**

5. In re claim 1, Kamel et al. shows a system [figs 1, 5B] for executing write and read data commands [READ, 106, WRITE 110, fig 5B], the system having a shared read/write buffer pool [buffer pool, col 2, lines 50-52] of blocks for temporarily storing write data to be sent to a peer device [20, 16 in fig 1] and read data received from the peer device, an apparatus for managing read and write data congestion in the buffer pool [fig 5B], the apparatus comprising:

a processor [10, fig 1] programmed for preventing an initiation of a new write data command [114, fig 5B; col 6, lines 51-52] until pending read data requests have been

processed enough to free up sufficient blocks in the buffer pool to accommodate the data of the new write data command [col 6, line 43; col 8, lines 40-41].

6. In re claim 2, Kamel et al. shows determining a number of blocks that will be required to store the read or write data for the pending read data requests and the new write data command [col 7, lines 1-8];

determining a number of free blocks in the buffer pool [col 6, lines 66-67]; and
throttling the new write data command if the number of free blocks is insufficient to store the read data for the pending read data requests and the write data for the new write data command [col 7, lines 6-20].

7. In re claim 3, Kamel et al. shows a receive list memory which contains descriptor pointers to free blocks [col 6, lines 65-66], and a free list memory which contains descriptor pointers to free blocks not referenced in the receive list memory [col 6, lines 66-67], and determining the number of free blocks in the buffer pool by summing the number of free blocks in the receive list memory and the free list memory [col 6, lines 55-66].

8. In re claim 4, Kamel et al. shows initiating the new write data command if the number of free blocks is sufficient to store the read data for the pending read data requests and the write data for the new write data command [col 8, lines 35-42].

9. In re claim 5, Richter et al. shows a receive list memory which contains descriptor pointers to free blocks and blocks filled with read data [col 6, lines 65-66], and a free list memory which contains descriptor pointers to free blocks not referenced in the receive

list memory [col 6, lines 66-67], the processor further programmed for determining the number of free blocks in the buffer pool by:

summing the number of free blocks in the receive list memory and the free list memory [col 6, lines 55-66]; and

subtracting from the sum a number of blocks estimated for storing incoming read data for any pending read data requests [col 7, lines 1-35].

10. In re claim 6, Kamel et al. shows the processor further programmed for initiating the new read or write data command if the number of free blocks is sufficient to store the read data for the pending read data requests and the write data for the new write data command [col 8, lines 35-42].

11. In re claim 7, Kamel et al. shows storing the throttled new write data command and any subsequent new read or write data commands into a first-in-first-out (FIFO) read/write command request queue [112, fig 5B];

processing pending read data requests to completion to free up blocks in the buffer pool [fig 5B; col 8, lines 35-42]; and

executing a next read or write data command from the read/write command request queue if the number of free blocks becomes sufficient to store the read or write data for the next read or write data command [col 8, lines 35-42; fig 5B].

12. Claims 12-18, and 23-29 are rejected under the same rationale as discussed above in claims 1-7.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 8-11, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamel et al., US Patent no. 6,263,411, as applied to claims 1-7 above, in view of Richet et al, US Publication no. US 2003/0046396 A1.

15. In re claims 8-11, Kamel et al. shows a host computer [fig 1]. Kamel et al. does not show upper layer protocols, an iSCSI controller circuit, a storage area network (SAN) wherein an iSCSI network is coupled to the iSCSI controller circuit and one or more storage devices are coupled to the iSCSI network. However, Richter et al. shows, as per claim 8, upper layer protocols [paragraph 0108], as per claim 9, an iSCSI controller circuit [paragraph 0117], as per claim 11, a storage area network (SAN) wherein an iSCSI network is coupled to the iSCSI controller circuit and one or more storage devices are coupled to the iSCSI network [paragraphs 0198, 0194, 1117]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include upper layer protocols, an iSCSI controller circuit, a storage area network (SAN) wherein an iSCSI network is coupled to the iSCSI controller circuit and one or more storage devices are coupled to the iSCSI network as shown in Richter et al. for allowing it to operate in multiple configurations including iSCSI network.

16. Claims 19-22 are rejected under the same rationale as discussed above in claims 8-11.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The centralized fax number is 571-273-8300.

The centralized hand carry paper drop off location is:

U.S. Patent and Trademark Office

Customer Service Window, Mail Stop _____
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application should be directed to the central telephone number (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is 571-272-4148. The examiner can normally be reached on Monday-Thursday 6AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4083. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harold J. Kim
Patent Examiner
August 21, 2005/HK


KIM HUYNH
PRIMARY EXAMINER
